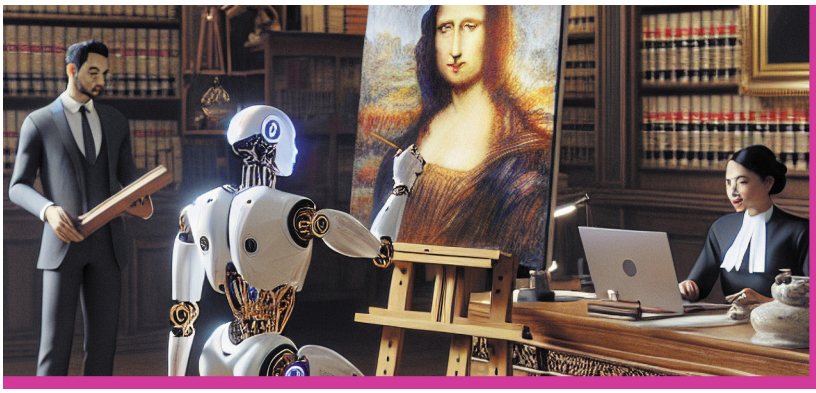
Supplement to the Los Angeles and San Francisco
Daily Journal
JULY 24, 2024



TOP ARTIFICIAL INTELLIGENCE LAWYERS 2024

David V. Sanker

David Sanker is a patent attorney who has many clients with technologies involving artificial intelligence, a journey he began around 2014.

Before his legal career, he earned a Ph.D. in mathematics, focusing on number theory and cryptography. He also spent three years teaching math and computer science, followed by a 12-year tenure as a software architect and engineer.

"With my background in both mathematics and software, it was easy to see the power of training AI models rather than writing procedural code," Sanker said. "For example, a spam filter using AI is much more powerful and adaptive than having a person identify and code for specific attributes."

Sanker's work on AI applications often requires him to stay abreast of new techniques, such as graph neural networks, which he learned about in 2023. His approach to learning is pragmatic, focusing on acquiring enough knowledge to excel in handling the inventions he works with.

One of his notable contributions was for the patent application of "Hybrid Fixed/Flexible Neural Network Architecture." This application addresses the inefficiencies of software-implemented AI neural networks and the limitations of immutable analog hardware chips.

Sanker's involvement in this patent showcases a hybrid approach, where a neural network is partially transformed into analog hardware, allowing for a balance between cost, speed and flexibility in AI hardware development. The innovation lies in creating a descriptor through the analog portion, which is complemented by a digital portion, enabling subsequent improvements without the need for entirely new hardware.

Sanker said the patent examination process can be unnecessarily harsh for AI applications that are software based. He noted, specifically, Section 101 of US patent law is regularly used to reject inventions as if they were "just an abstract idea." Some examiners are particularly harsh on this, and the PTAB generally affirms 101 rejections, he said.

"Europe is similar with respect to Patent Subject Matter Eligibility and has a particular distaste for any invention that uses Natural Language Processing," Sanker said. "According to European precedent, NLP is 'just linguistics' and therefore carries no patentable weight. For both the United States and Europe, if an AI invention is software-based, I have to work extra hard to identify the technical problem and technical solution to the technical problem. I have also developed a simplified framework in 2019 for evaluating patentability of AI inventions, and that helps to focus on the right tasks."

Looking ahead, Sanker said there is going to be substantially more AI in all aspects of litigation, including: AI tools to improve the efficiency of document review and other administrative tasks; AI tools to identify litigation targets more quickly; AI tools to write substantial portions of documents submitted to courts; litigation over the use of AI, such as for HR and use of copyrighted material to train AI models; litigation for infringement of inventions or works that use AI; and more. Further down the road we will also see litigation regarding AI inventors.

"Although LLMs are the big deal right now, I expect to see more advanced AI techniques, but it will probably be a couple years before we see anything significant that outshines LLMs," Sanker said.

SankerIP
UNION CITY